

Policy Challenges and Opportunities from the Research Library Community Perspective

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ASSOCIATION OF RESEARCH LIBRARIES

Overview

- Open Access and Digital Repositories
- E-Science and E-Research
- Workforce Development
- Challenges and Opportunities, Legislation and Executive Branch Initiatives
- Summary and Conclusions

“By open access, we mean its **free availability** on the public internet, permitting any users to **read, download, copy, distribute, print, search or link to the full text of these articles, crawl them for indexing, pass them as data to software** or use them for any other lawful purpose...”

– The Budapest Open Access Initiative –
February 14, 2002

More than 7,000 OA Journals



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To see a table with the current spread of journals by country please visit the link below.
The table allows you to see the number of countries currently listed in DOAJ as well as the number of added titles/total number of titles per year and country.

[DOAJ by Country](#)

Today's visitors

 Journals added last 7 days

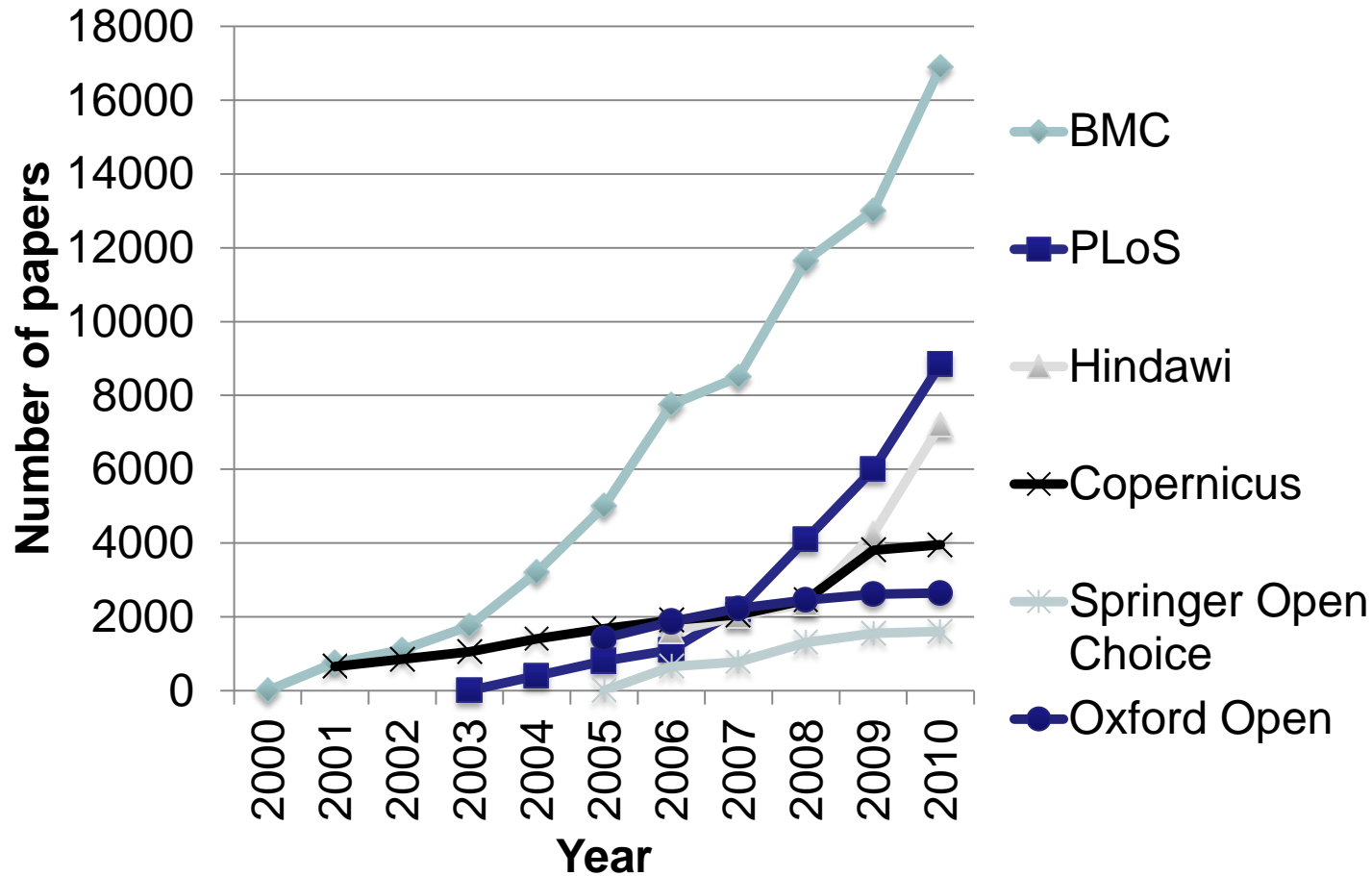
 Journals added last 30 days

Open Access info

For publishers



OA Papers Published 2000-2010



Some data courtesy of Mark Patterson (PLoS), from Patterson: 'Open Access Publishers: Breaking even and growing fast,' delivered at APE 2011: <http://river-valley.tv/open-access-publishers-breaking-even-and-growing-fast/>

Growth of Open Access Policies



COAPI

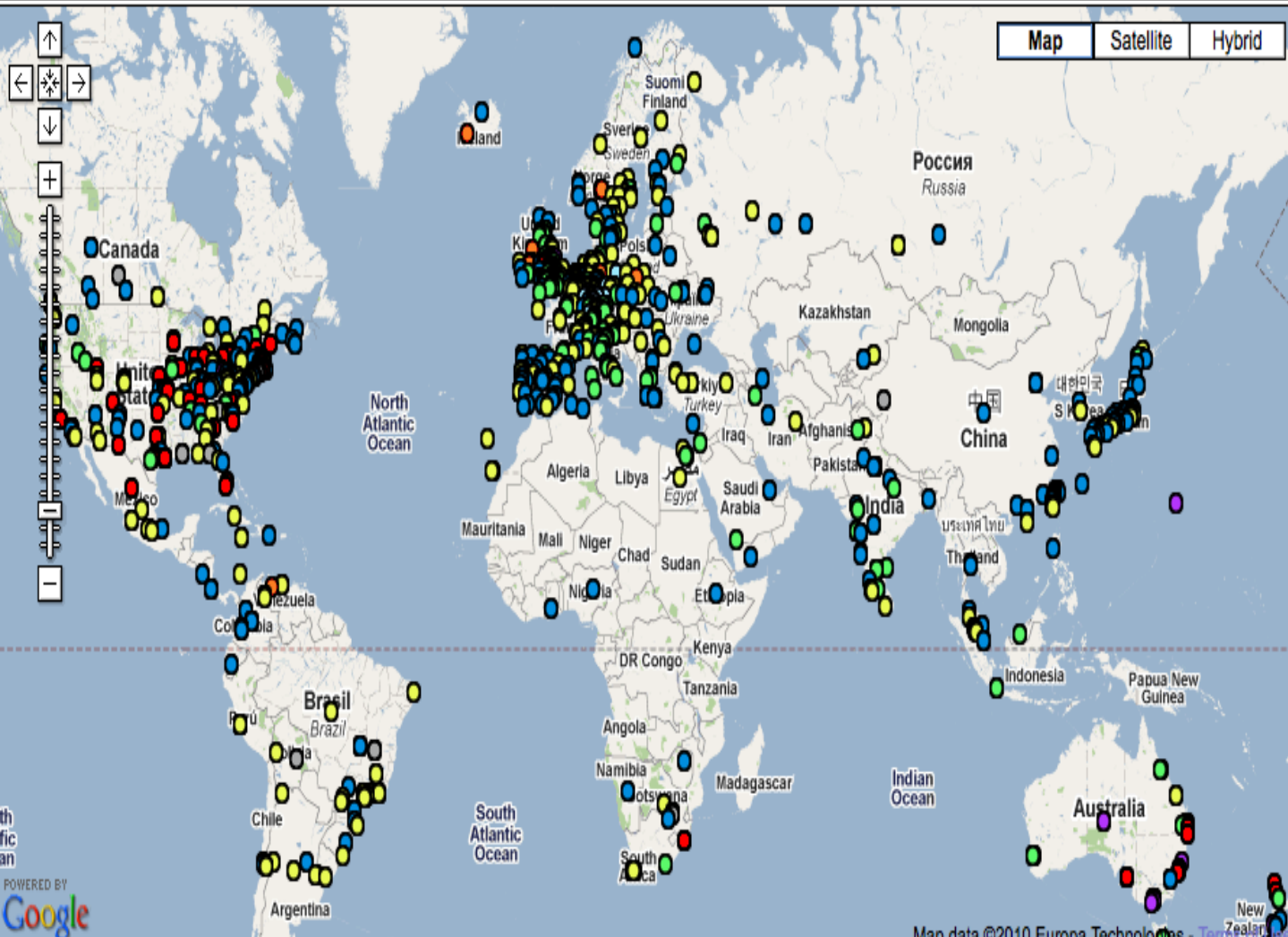
- Coalition of Open Access Policy Institutions
- COAPI will collaborate and share implementation strategies and advocate on a national level for institutions with open access policies.
- 22 academic institutions
- “This new coalition will offer academic institutions an opportunity to stand together and establish open access to knowledge in the sciences and humanities as a broad societal norm.” Lorraine Haricombe, Dean of Libraries, University of Kansas.

COAPI Members

- Arizona State University
- Brigham Young University
- Columbia University
- Concordia University
- Duke University
- Emory University
- Gustavus Adolphus College
- Harvard University
- Indiana University–Purdue University Indianapolis (IUPUI)
- Lafayette College
- Massachusetts Institute of Technology (MIT)
- Oberlin College
- Oregon State University
- Rollins College
- Stanford University
- Trinity University
- University of Hawaii-Manoa
- University of Kansas
- University of North Texas
- University of Northern Colorado
- University of Oregon
- Wake Forest University



Platform: All (1422) Country: All (1422) Registered between January 1990 and February 2010 filter results show all



Information bar

- [DSpace](#) (480)
 - [EPrints](#) (283)
 - [BEPRESS](#) (91)
 - [ETD-db](#) (36)
 - [OPUS](#) (28)
 - [Fedora](#) (23)
 - [OpenRepository](#) (15)
 - [Other repository](#) (466)
- (Show all)

[Normal icons](#) | [Repository size icons](#)

There are **21,500,046** items held in the 1422 repositories on this map.

Download a map for [Google Earth](#):

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Data provided by: [ROAR](#) & [OpenDOAR](#)

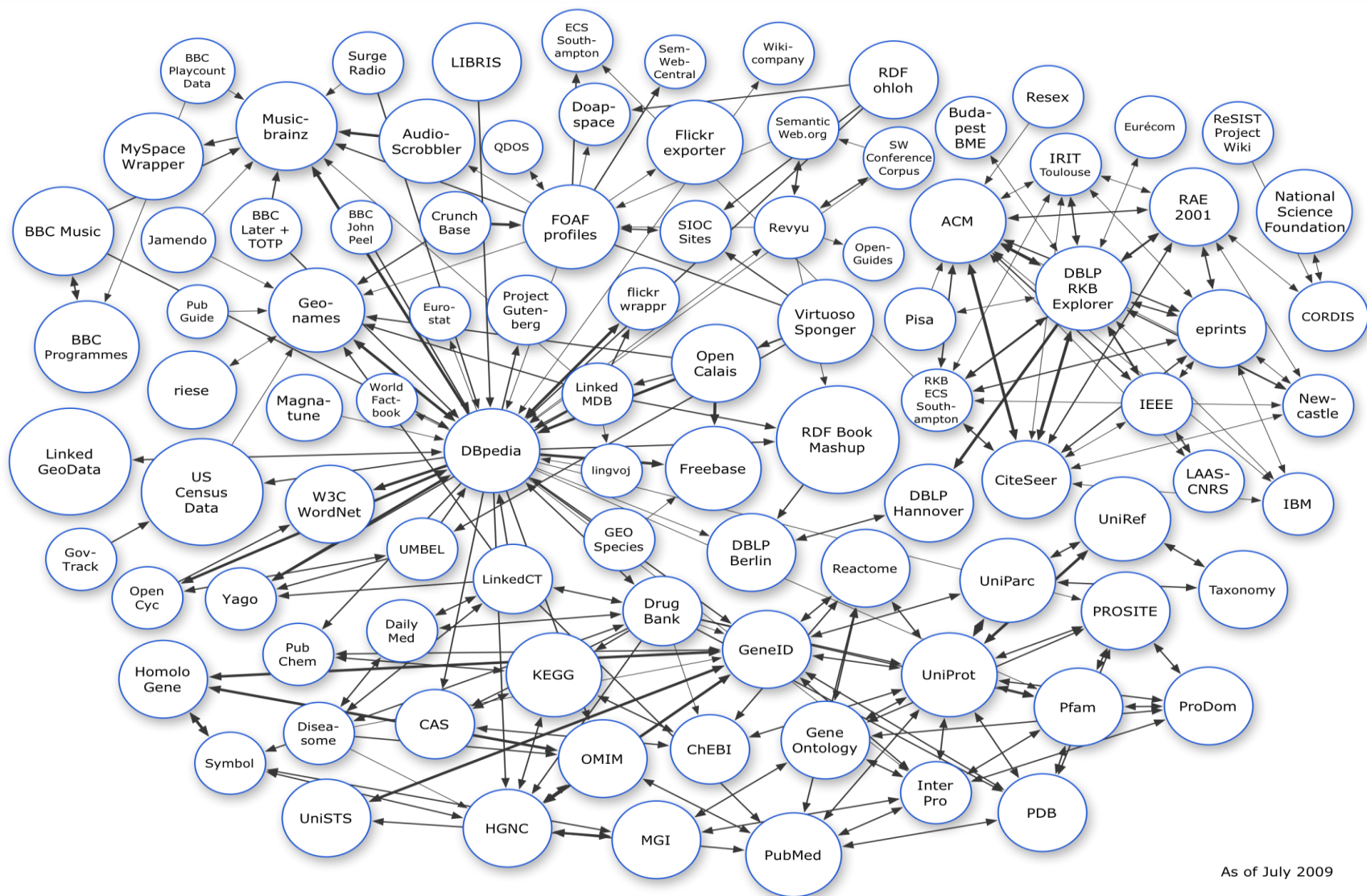
Copyright 2010 [Stuart Lewis](#).



- [About the maps](#) -

- [Read the Repository map mashup blog](#) -

Open Data



As of July 2009

Goals of E-Science Institute

To advance research libraries' capacity to support e-science/e-research by:

- Promoting program development among ARL and DLF members.
- Enabling development of a community of professionals engaged in this work.
- Fostering collaboration between member institutions.

Outcomes for Institutions that Participate

- Development of a local strategic agenda for e-science support.
- Exchange of community emerging practices.
- Connection with a community of staff engaged in program planning and deployment.

ARL/DLF E-Science Institute

<http://www.arl.org/rtl/eresearch/escien/escieninstitute/index.shtml>

- **e-Research**

The term e-Research refers to the use of information technology to support existing and new forms of scholarly research in all academic disciplines, including the humanities and social sciences. E-research encompasses computational and e-science, cyberinfrastructure and data curation. E-Research projects often make use of grid computing or other advanced technologies, and are usually data intensive, but the concept also includes research performed digitally at any scale. E-research is useful here as a way to bridge the concept of e-science to other fields such as social science and the humanities. Just as e-science applies large-scale computing to processing vast amounts of scientific research data, e-research could include studies of large linguistic corpora in the humanities, or integrated social policy analyses in the social sciences.

Strategic Agenda Template

- **Background**
Summarized self-assessment and SWOT analysis
- **Potential opportunities that align with strategic priorities**
 - Data curation
 - Metadata/ontologies
 - Outreach/support
 - Facilities
 - Other
- **Risk assessment of opportunities**
- Opportunity cost (what will happen if we don't it)
- Risks of failure (what could happen if we do)
- **Organizational implications**
- Staff capacity
- Tools and resources
- Institutional partners
- External partners
- **Next steps**
- Within the library
- At your university
- In partnership with other institutions (consortium, etc.)
- With 3rd party service providers
- With professional associations or other organizations (e.g., ARL, DLF, EDUCAUSE, etc.)

E-Science Institute Sponsors and Supporters

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University of New Mexico Libraries
University of North Carolina at Chapel Hill
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University of Pennsylvania Library
University of Pittsburgh Libraries
University of Tennessee Libraries
University of Toronto Libraries
University of Utah Library
University of Washington Libraries
University of Waterloo Library
University of Wisconsin-Madison Libraries
Virginia Tech Libraries
Washington University in St. Louis Libraries

E-Science Institute Supporters

Louisiana State University Libraries
National Library of Medicine
University of Missouri-Columbia Libraries

21st Century Workforce

- Initiative to Recruit a Diverse Workforce: Attract students from racial and ethnic minority groups to careers in academic and research libraries with a focus on science and technology.
- Transforming Research Libraries: Promote and facilitate the development of a diverse group of library professionals who have the expertise and knowledge to lead and participate in new partnerships with researchers and university faculty.

Bertha Chang University of Illinois at Urbana-Champaign



Bertha Chang is pursuing a master's degree in the School of Library and Information Science at the University of Illinois at Urbana-Champaign (UIUC). Bertha received both her SB and PhD from the Department of Materials Science and Engineering at the Massachusetts Institute of Technology. After graduation, Bertha worked for over twelve years at Applied Materials, where she held positions of senior process engineer, senior member of technical staff, and senior engineering manager. Currently, Bertha works as a graduate assistant at the Grainger Engineering Library Information Center at UIUC. She is interested in working in science and engineering libraries with a focus on reference and information services.

Access is a National Policy Issue



Legislation and Administrative Action

- Stop Online Piracy Act – SOPA
- Protect Intellectual Property Act – PIPA
- Research Works Act – RWA
- Federal Research Public Access Act – FRPAA
- GRANT Act
- RFIs on Federally Funded Peer-Reviewed Publications and Digital Data

Summary and Conclusions: Challenges Ahead with OA

- Researcher awareness of OA not high enough
- Perceived barriers still in place:
 - Disciplinary differences
 - New forms of scholarship not yet trusted
 - Uncertainty over sustainability
- Incentive and reward structures need to be aligned with goal of open

Summary and Conclusions

- New legislation has polarized the debate and presents both opportunities and significant challenges to building needed infrastructure and “open” policies.
- Mandates will quicken adoption of sharing policies and promote cultural change.
- Research institutions cannot manage lots of “variations on a theme” regarding data and peer-reviewed literature policies.
- New thinking, new approaches and new partnerships are needed for managing the life cycle of data.

Summary and Conclusions, continued

- Investments in digital repositories provide the foundation extending the infrastructure to support data.
- Continued education of researchers and academic leadership is imperative.
- Additional federal funding to support new e-science/e-research workforce needed.
- Are there potential collaborations between the e-science/e-research library community and CENDI agencies?